UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,162	07/03/2003	Xuejun You	9896-000003	9181

27572   7590   07/10/2008
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER
RUSSELL, WANDA Z

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
07/10/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>04 June 2008</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☐ Claim(s) <u>1-9</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-9</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

6/4/2008 has been entered.

Claim Rejections - 35 USC § 102

2.   **Claims 1-9** are rejected under 35 U.S.C. 102(e) as being anticipated by Svacek

et al. (Pub No. US 2002/0163937 A1).

For **claim 6**, Svacek et al. teach an apparatus (Figs. 2 and 3) for dynamic

allocation of slot bandwidth (dynamic allocation, [0020], line 2), comprising:

N slots (Fig. 2, and the allocation device 18 is comprised of sixteen (16) slots,

refer to [0025], last 5 lines), N denoting the number of slots for dynamic bandwidth

allocation (N=16 in Fig. 2. See [0025], last 5 lines);

B/ΔB pieces (modules, personality modules, refer to [0029], line 1) of N-selected-

one devices (each module among N modules, [0025], line 9 & lines 7-12), input

bandwidth of every N-selected-one device being N*ΔB (bandwidth in [0028], line 7, is

N*ΔB as claimed. N*ΔB could be equal or less than B), B (system's bandwidth in [0026],

line 12, is B as claimed) denoting bandwidth need to be dynamically allocated, ΔB

(number of parallel bits to each slot in [0012], 3rd line from the end, is ΔB as claimed, and [0032], lines 7-8 & 5-10) denoting a minimum allocated bandwidth unit; and

a main switch module (34, 42, and 44 -Fig. 3),

Wherein N inputs of each N-selected-one device communicate with the N slots respectively (28-32 –Fig. 3, and [0029], lines 1-4), and an output of each N-selected-one device communicates with the main switch module (34 along with 42, and 44 -Fig. 3), and the main switch module communicate with the N-selected- one devices for controlling the N-selected-one devices to allocate the bandwidth to communicated slots ([0012], last 5 lines, [0031], lines 7-9, and [0032], lines 1-10).

For **claim 7**, Svacek et al. teach the apparatus according to claim 6, further comprising:

a programmable logic chip controlled by the main switch module for providing , strobe signals to control the N- selected-one devices ([0033], line 4-5).

For **claim 8**, Svacek et al. teach the apparatus according to claim 7, wherein the programmable logic chip is an Electrically Programmable Logical Device (EPLD) (computer PLD, [0033], line 4-5).

For **claim 9**, Svacek et al. teach an apparatus for dynamic allocation of slot bandwidth, comprising:

N slots, N being an integer greater than 1 (Fig. 2, and [0025], last 5 lines);

a main switch module (34, 42, and 44 -Fig. 3);

B/ΔB pieces (modules, [0029], line 1) of N-selected-one devices that each have N inputs and an output and that each are operable to select one of the N inputs to

establish communication between the selected input and the output (each module among N modules, [0025], line 9 & lines 7-12; and Each slot can hold a variety of different peripheral cards or personality modules to interface the allocation device 18, [0025], lines 3-5. Note that the peripheral cards are for inputs and outputs), B (system's bandwidth in [0026], line 12, is B as claimed) denoting bandwidth to be dynamically allocated, ΔB (number of parallel bits to each slot in [0012], 3rd line from the end, is ΔB as claimed, and [0032], lines 7-8 & 5-10) denoting a minimum allocated bandwidth unit and being no greater than a half of B (only 40 parallel bits can be supported at one time, [0032], lines 9-10. Note that total is 80 bits, [0032], line 8); and

Wherein the N inputs of each of the N-selected-one devices are in communication with the N slots respectively, the output of each of the N-selected-one devices is in communication with the main switch module (the dynamic bandwidth allocation system of the present invention allows each personality module to utilize different amounts of system bandwidth to transmit payloads giving the system the ability to simultaneously transmit a variety of data formats, [0025], lines 8-12), the main switch module controls each of the N-selected-one devices to select one of the N slots and to allocate one AB bandwidth to the selected slot (Fig. 2, and [0028]).

For **claims 1-5**, they are method claims of claims 6-9; therefore they are rejected for the same reason above.

Response to Amendment

3.   Applicant's amendment filed 4/9/2008 has been received and considered.

Response to Arguments

1.   Applicant's arguments filed 6/4/2008 with respect to claim(s) 1-9 have been fully considered but they are not persuasive.

2.   Applicant argues that the N-selected-one devices of claim 6 perform dynamic allocation of the bandwidth to the N slots; in contrast, the modules of Svacek are placed in the slots and receive allocated bandwidth, rather than allocate bandwidth for other modules.

        In response, the Examiner respectfully disagrees.

        In para. [0025], lines 7-10, Svacek teaches "the dynamic bandwidth allocation system allows each personality module to utilize different amounts of system bandwidth to transmit payloads giving the system the ability to simultaneously transmit a variety of data formats".

3.   Applicant argues that the modules of Svacek at best appears to be merely inserted in the slot without any information concerning its input or output being disclosed.

        In response, the Examiner respectfully disagrees.

        In para. [0025], lines 3-5, Svacek teaches "Each slot can hold a variety of different peripheral cards or personality modules to interface the allocation device 18. The peripheral cards are for inputs and outputs".

4.   Applicant argues that claim 6 calls for B/ΔB pieces of N-selected-one devices and Svacek fails to anticipate these limitations.

        In response, the Examiner respectfully disagrees.

In addition to [0012], last 5 lines, the paragraph [0032], lines 5-12 states "A system comprised of eight (8) personality modules #1-8 each requiring ten (10) <u>parallel bits of bandwidth</u> for a total of eighty (80) parallel bits, can utilize all of the personality modules, even if only 40 parallel bits can be supported at one time".

5.   Applicant argues that the main control module in claim 6, the N-selected-one devices communicate between the main control module and the N slots, so it is an indirect connection between the main control module and the slots, but the bandwidth of Svacek is directly allocated to the slots by running the program.

In response, the Examiner respectfully disagrees.

The peripheral cards or personality modules which communicate between the main control module and the N slots (Fig. 2, and dynamically allocate the bandwidth to the personality modules, [0028], lines 6-8) by Svacek are equivalent to the N-selected-one devices as claimed. The bandwidth of Svacek is allocated to the personality modules, then to the slots indirectly.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WANDA Z. RUSSELL whose telephone number is (571)270-1796. The examiner can normally be reached on Monday-Thursday 9:00-6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Seema S. Rao/
Supervisory Patent Examiner, Art
Unit 2616

/Wanda Z Russell/
Examiner, Art Unit 2616